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102-F5 18165

Math for Liberal Arts
Dr Matthew Sunderland

at least at first

1. Synchronous lecture Monday 8:00–9:55 Wednesday 8:00–8:50
   https://zoom.us/meeting/register/tJUocu6trTsuHtA5anoJr5LEor8D1iMFQZZr
2. Online problem sets due Sundays
   https://www.math.csi.cuny.edu/webwork2/Math102_18165_Sunderland_F20/
   Username and password both initially set to your CUNYfirst login (eg, first.last00)
3. Written assignments due some Sundays on
   https://www.gradescope.com course code 9Z28GZ
4. Reading assignments due each night before lecture
   Mathematical Excursions 4e by Aufmann, Lockwood, Nation, Clegg (Houghton Mifflin)
   college bookstore, or elsewhere
5. Office hours TBA
   https://zoom.us/my/mattsunderland
6. Announcements, Lecture Recordings, and Grades posted on
   https://bbhosted.cuny.edu
7. Platform for administering exams TBA,
   possibly Blackboard, Gradescope, WeBWorK, Respondus, or Proctortrack

click syllabus

on blackboard I will also email it

Day 1 Homework

1. Download Zoom and create free account ✓
2. Do Online Problem Set 1 by Sunday 8/30
3. Submit Written Assignment 1 by Sunday 8/30—see last two pages of syllabus
4. Do first reading assignment (Section 9.1) by Sunday 8/30
5. Do office hour survey https://forms.gle/RRf74atLQkR3kg5DA

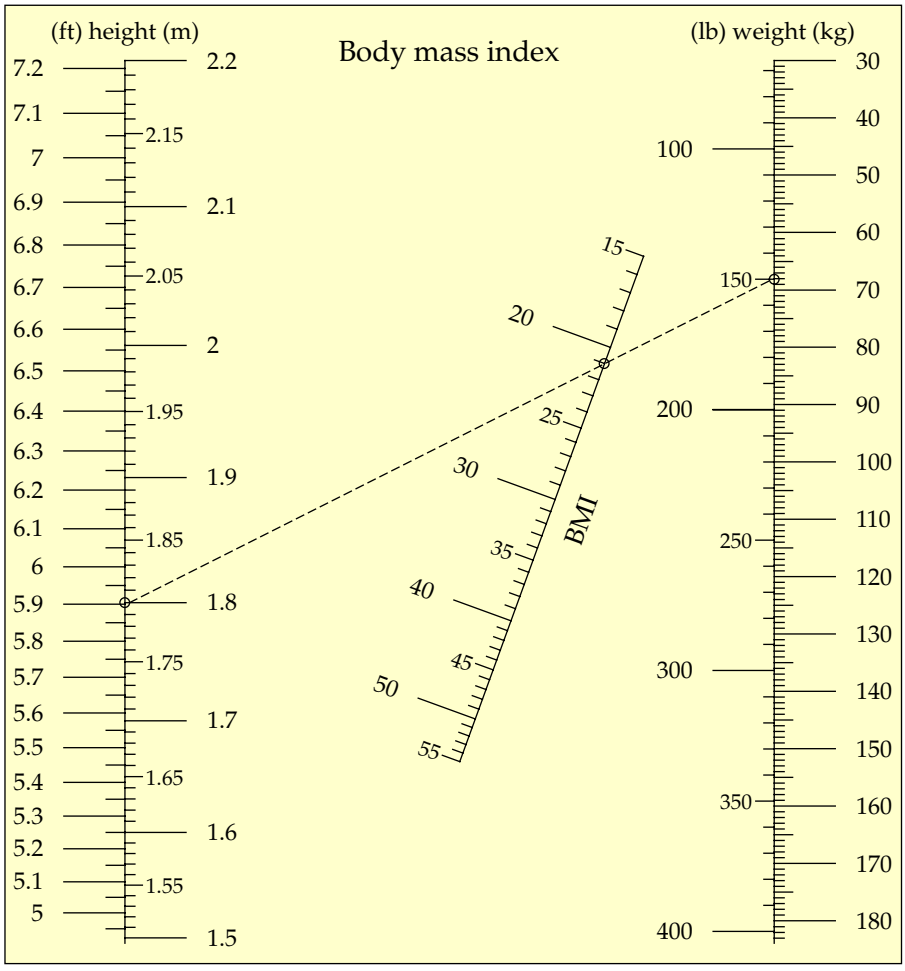
Course Grade = Average of
- Coursework
  1. Lecture participation
  2. Online problem sets
  3. Written assignments
- Exam 1
- Exam 2
- Final

Lecture Recording Statement *Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.*

Deadlines Add 9/1 Drop 9/15 Withdraw 11/6

by using the nomograph compare with the value you obtained by using a calculator?

c. Explain the advantages and disadvantages of using a nomograph to calculate BMI.



EXERCISE SET 9.1

1. What is the difference between an expression and an equation? Provide an example of each.

2. What is the solution of the equation $x = 8$? Use your answer to explain why the goal in solving an equation is to get the variable alone on one side of the equation.

3. Explain how to check the solution of an equation.

■ In Exercises 4 to 41, solve the equation.

4. $x + 7 = -5$

5. $9 + b = 21$

6. $-9 = z - 8$

7. $b - 11 = 11$

8. $-3x = 150$

9. $-48 = 6z$

10. $-9a = -108$

11. $-\frac{3}{4}x = 15$

12. $\frac{5}{2}x = -10$

13. $-\frac{x}{4} = -2$

14. $\frac{2x}{5} = -8$

15. $4 - 2b = 2 - 4b$

16. $4y - 10 = 6 + 2y$

17. $5x - 3 = 9x - 7$

18. $10z + 6 = 4 + 5z$

19. $3m + 5 = 2 - 6m$

20. $6a - 1 = 2 + 2a$

21. $5x + 7 = 8x + 5$

22. $2 - 6y = 5 - 7y$

23. $4b + 15 = 3 - 2b$

24. $2(x + 1) + 5x = 23$

25. $9n - 15 = 3(2n - 1)$

26. $7a - (3a - 4) = 12$

27. $5(3 - 2y) = 3 - 4y$

5. $9 + b = 21$

$b = \boxed{12}$ subtract 9

9. $-48 = 6z$

$-8 = z$ divide by 6

17. $5x - 3 = 9x - 7$

~~$5x - 12 = 9x - 16$ subtract 9~~

$5x + 4 = 9x$ add 7

$4 = 4x$ Subtract $5x$

$\boxed{1 = x}$ divide 4

we know how to finish from here (it's like Q9.)

$-3 + 7 = 4$

lose 3 gain 7 gain 4

$7 - 3 = 4$

gain 7 lose 3 gain 4

number in front called coefficient

$3m + 6m = 9m$

Combining like terms → add coefficients

3 feet + 6 feet = 9 feet

3 oranges + 6 oranges = 9 oranges

19. $3m + 5 = 2 - 6m$

$9m + 5 = 2$ add $6m$

$9m = -3$ Subtract 5

$m = -3/9$ divide 9

$= \boxed{-1/3}$